

Appendix IV to Part 268-Wastes Excluded From Lab Packs Under the Alternative Treatment Standards of Section 268.42(c)

Hazardous waste with the following EPA Hazardous Waste Codes may not be placed in lab packs under the alternative lab pack treatment standards of § 268.42(c): D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.\*

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## Appendix VI--Recommended Technologies to Achieve Deactivation of Characteristics in Section 11-268-42

The treatment standard for many characteristic wastes is stated in the Sec. 11-268-40 Table of Treatment Standards as ``Deactivation and meet UTS.'' EPA has determined that many technologies, when used alone or in combination, can achieve the deactivation portion of the treatment standard. Characteristic wastes that are not managed in a facility regulated by the Clean Water Act (CWA) or in a CWA-equivalent facility, and that also contain underlying hazardous constituents (see Sec. 11-268-2(i)) must be treated not only by a ``deactivating'' technology to remove the characteristic, but also to achieve the universal treatment standards (UTS) for underlying hazardous constituents. The following appendix presents a partial list of technologies, utilizing the five letter technology codes established in 11-268-42 Table 1, that may be useful in meeting the treatment standard. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery, and/or the use of other pretreatment technologies, provided deactivation is achieved and underlying hazardous constituents are treated to achieve the UTS.

Waste code/subcategory	Nonwastewaters	Wastewaters
D001 Ignitable Liquids based on 11-261-21(a)(1) -- Low TOC Nonwastewater Subcategory (containing 1% to <10% TOC)	RORGS INCIN WETOX CHOXD BIODG	n.a.
D001 Ignitable Liquids based on 11-261-21(a)(1) -- Ignitable Wastewater Subcategory (containing <1% TOC)	n.a.	RORGS INCIN WETOX CHOXD BIODG
D001 Compressed Gases based on 11-261-21(A)(3)	RCGAS INCIN FSUBS ADGAS fb. INCIN ADGAS fb. (CHOXD; or CHRED)	n.a.
D001 Ignitable Reactives based on 11-261-21(a)(2)	WTRRX CHOXD CHRED STABL INCIN	n.a.
D001 Ignitable Oxidizers based on 11-261-21(a)(4)	CHRED INCIN	CHRED INCIN

D002 Acid Subcategory based on 11-261-22(a)(1) with pH less than or equal to 2	RCORR NEUTR INCIN	NEUTR INCIN
D002 Alkaline Subcategory based on 11-261-22(a)(1) with pH greater than or equal to 12.5	NEUTR INCIN	NEUTR INCIN
D002 Other Corrosives based on 11-261-22(a)(2)	CHOXD CHRED INCIN STABL	CHOXD CHRED INCIN
D003 Water Reactives based on 11-261-23(a) (2), (3), and (4)	INCIN WTRRX CHOXD CHRED	n.a.
D003 Reactive Sulfides based on 11-261-23(a)(5)	CHOXD CHRED INCIN STABL	CHOXD CHRED BIODG INCIN
D003 Explosives based on 11-261-23(a) (6), (7), and (8)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
D003 Other Reactives based on 11-261-23(a)(1)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
K047 Pink/red water from TNT operations	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN

FOOTNOTE: Note: "n.a." stands for "not applicable"; "fb." stands for "followed by".

# Appendix VIII to Chapter 11-268

## National Capacity LDR Variances for UIC Wastes<sup>a</sup>

Waste code	Waste category	Effective date
F001-F005 .....	All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents.	Aug. 8, 1990.
D001 (except High TOC Ignitable Liquids Subcategory) <sup>c</sup> .	All .....	Feb. 10, 1994.
D001 (High TOC Ignitable Characteristic Liquids Subcategory).	Nonwastewater .....	Sept. 19, 1995.
D002 <sup>b</sup> .....	All .....	May 8, 1992.
D002 <sup>c</sup> .....	All .....	Feb. 10, 1994.
D003 (cyanides) .....	All .....	May 8, 1992.
D003 (sulfides) .....	All .....	May 8, 1992.
D003 (explosives, reactives) .....	All .....	May 8, 1992.
D007 .....	All .....	May 8, 1992.
D009 .....	Nonwastewater .....	May 8, 1992.
D012 .....	All .....	Sept. 19, 1995.
D013 .....	All .....	Sept. 19, 1995.
D014 .....	All .....	Sept. 19, 1995.
D015 .....	All .....	Sept. 19, 1995.
D016 .....	All .....	Sept. 19, 1995.
D017 .....	All .....	Sept. 19, 1995.
D018 .....	All, including mixed with radioactive wastes. ....	Apr. 8, 1998.
D019 .....	All, including mixed with radioactive wastes. ....	Apr. 8, 1998.
D020 .....	All, including mixed with radioactive wastes. ....	Apr. 8, 1998.
D021 .....	All, including mixed with radioactive wastes. ....	Apr. 8, 1998.
D022 .....	All, including mixed with radioactive wastes. ....	Apr. 8, 1998.
D023 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D024 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D025 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.

D026 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D027 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D028 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D029 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D030 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D031 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D032 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D033 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D034 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D035 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D036 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D037 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D038 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D039 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D040 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D041 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D042 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
D043 .....	All, including mixed radioactive wastes .....	Apr. 8, 1998.
F007 .....	All .....	June 8, 1991.
F032 .....	All, including mixed radioactive wastes .....	May 12, 1999.
F034 .....	All, including mixed radioactive wastes .....	May 12, 1999.
F035 .....	All, including mixed radioactive wastes .....	May 12, 1999.

F037	All	Nov. 8, 1992.
F038	All	Nov. 8, 1992.
F039	Wastewater	May 8, 1992.
K009	Wastewater	June 8, 1991.
K011	Nonwastewater	June 8, 1991.
K011	Wastewater	May 8, 1992.
K011	Nonwastewater	June 8, 1991.
K011	Wastewater	May 8, 1992.
K013	Nonwastewater	June 8, 1991.
K013	Wastewater	May 8, 1992.
K014	All	May 8, 1992.
K016 (dilute)	All	June 8, 1991.
K049	All	Aug. 8, 1990.
K050	All	Aug. 8, 1990.
K051	All	Aug. 8, 1990.
K052	All	Aug. 8, 1990.
K062	All	Aug. 8, 1990.
K071	All	Aug. 8, 1990.
K088	All	Jan. 8, 1997.
K104	All	Aug. 8, 1990.
K107	All	Nov. 8, 1992.
K108	All	Nov. 9, 1992.
K109	All	Nov. 9, 1992.
K110	All	Nov. 9, 1992.
K111	All	Nov. 9, 1992.
K112	All	Nov. 9, 1992.
K117	All	June 30, 1995.
K118	All	June 30, 1995.
K123	All	Nov. 9, 1992.
K124	All	Nov. 9, 1992.
K125	All	Nov. 9, 1992.
K126	All	Nov. 9, 1992.
K131	All	June 30, 1995.
K132	All	June 30, 1995.
K136	All	Nov. 9, 1992.

K141 .....	All .....	Dec. 19, 1994.
K142 .....	All .....	Dec. 19, 1994.
K143 .....	All .....	Dec. 19, 1994.
K144 .....	All .....	Dec. 19, 1994.
K145 .....	All .....	Dec. 19, 1994.
K147 .....	All .....	Dec. 19, 1994.
K148 .....	All .....	Dec. 19, 1994.
K149 .....	All .....	Dec. 19, 1994.
K150 .....	All .....	Dec. 19, 1994.
K151 .....	All .....	Dec. 19, 1994.
K156 .....	All .....	July 8, 1996.
K157 .....	All .....	July 8, 1996.
K158 .....	All .....	July 8, 1996.
K159 .....	All .....	July 8, 1996.
K160 .....	All .....	July 8, 1996.
K161 .....	All .....	July 8, 1996.
P127 .....	All .....	July 8, 1996.
P128 .....	All .....	July 8, 1996.
P185 .....	All .....	July 8, 1996.
P188 .....	All .....	July 8, 1996.
P189 .....	All .....	July 8, 1996.
P190 .....	All .....	July 8, 1996.
P191 .....	All .....	July 8, 1996.
P192 .....	All .....	July 8, 1996.
P194 .....	All .....	July 8, 1996.
P196 .....	All .....	July 8, 1996.
P197 .....	All .....	July 8, 1996.
P198 .....	All .....	July 8, 1996.
P199 .....	All .....	July 8, 1996.
P201 .....	All .....	July 8, 1996.
P202 .....	All .....	July 8, 1996.
P203 .....	All .....	July 8, 1996.
P204 .....	All .....	July 8, 1996.
P205 .....	All .....	July 8, 1996.
U271 .....	All .....	July 8, 1996.

U277	All	July 8, 1996.
U278	All	July 8, 1996.
U279	All	July 8, 1996.
U280	All	July 8, 1996.
U328	All	Nov. 9, 1992.
U353	All	Nov. 9, 1992.
U359	All	Nov. 9, 1992.
U364	All	July 8, 1996.
U365	All	July 8, 1996.
U366	All	July 8, 1996.
U367	All	July 8, 1996.
U372	All	July 8, 1996.
U373	All	July 8, 1996.
U375	All	July 8, 1996.
U376	All	July 8, 1996.
U377	All	July 8, 1996.
U378	All	July 8, 1996.
U379	All	July 8, 1996.
U381	All	July 8, 1996.
U382	All	July 8, 1996.
U383	All	July 8, 1996.
U384	All	July 8, 1996.
U385	All	July 8, 1996.
U386	All	July 8, 1996.
U387	All	July 8, 1996.
U389	All	July 8, 1996.
U390	All	July 8, 1996.
U391	All	July 8, 1996.
U392	All	July 8, 1996.
U395	All	July 8, 1996.
U396	All	July 8, 1996.
U400	All	July 8, 1996.
U401	All	July 8, 1996.
U402	All	July 8, 1996.
U403	All	July 8, 1996.



U404 .....	All .....	July 8, 1996.
U407 .....	All .....	July 8, 1996.
U409 .....	All .....	July 8, 1996.
U410 .....	All .....	July 8, 1996.
U411 .....	All .....	July 8, 1996.

<sup>a</sup> Wastes that are deep well disposed on-site receive a six-month variance, with restrictions effective in November 1990.

<sup>b</sup> Deepwell injected D002 liquids with a pH less than 2 must meet the California List treatment standards on August 8, 1990.

<sup>c</sup> Managed in systems defined in 40 CFR 144.6(e) and 14.6(e) as Class V injection wells, that do not engage in CWA-equivalent treatment before injection.

Note: This table is provided for the convenience of the reader.

Appendix IX to Part 268 -- Extraction Procedure (EP) Toxicity Test  
Method and Structural Integrity Test (Method 1310)

Note: The EP (Method 1310) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

Appendix XI to Part 268--Metal Bearing Wastes Prohibited From Dilution in a Combustion Unit According to Section 11-268-3(c)<sup>1</sup>

Waste code	Waste description
D004 . . . . .	Toxicity Characteristic for Arsenic.
D005 . . . . .	Toxicity Characteristic for Barium.
D006 . . . . .	Toxicity Characteristic for Cadmium.
D007 . . . . .	Toxicity Characteristic for Chromium.
D008 . . . . .	Toxicity Characteristic for Lead.
D009 . . . . .	Toxicity Characteristic for Mercury.
D010 . . . . .	Toxicity Characteristic for Selenium.
D011 . . . . .	Toxicity Characteristic for Silver.
F006 . . . . .	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.
F007 . . . . .	Spent cyanide plating bath solutions from electroplating operations.
F008 . . . . .	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009 . . . . .	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010 . . . . .	Quenching bath residues from oil baths from metal treating operations where cyanides are used in the process.
F011 . . . . .	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012 . . . . .	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.
F019 . . . . .	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum car washing when such phosphating is an exclusive conversion coating process.
K002 . . . . .	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003 . . . . .	Wastewater treatment sludge from the production of molybdate orange pigments.
K004 . . . . .	Wastewater treatment sludge from the production of zinc yellow pigments.

K005	. . . . .	Wastewater treatment sludge from the production of chrome green pigments.
K006	. . . . .	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).
K007	. . . . .	Wastewater treatment sludge from the production of iron blue pigments.
K008	. . . . .	Oven residue from the production of chrome oxide green pigments.
K061	. . . . .	Emission control dust/sludge from the primary production of steel in electric furnaces.
K069	. . . . .	Emission control dust/sludge from secondary lead smelting.
K071	. . . . .	Brine purification muds from the mercury cell processes in chlorine production, where separately prepurified brine is not used.
K100	. . . . .	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
K106	. . . . .	Sludges from the mercury cell processes for making chlorine.
P010	. . . . .	Arsenic acid $\text{H}_3\text{AsO}_4$
P011	. . . . .	Arsenic oxide $\text{As}_2\text{O}_5$
P012	. . . . .	Arsenic trioxide
P013	. . . . .	Barium cyanide
P015	. . . . .	Beryllium
P029	. . . . .	Copper cyanide $\text{Cu}(\text{CN})$
P074	. . . . .	Nickel cyanide $\text{Ni}(\text{CN})_2$
P087	. . . . .	Osmium tetroxide
P099	. . . . .	Potassium silver cyanide
P104	. . . . .	Silver cyanide
P113	. . . . .	Thallic oxide
P114	. . . . .	Thallium (I) selenite
P115	. . . . .	Thallium (I) sulfate
P119	. . . . .	Ammonium vanadate
P120	. . . . .	Vanadium oxide $\text{V}_2\text{O}_5$
P121	. . . . .	Zinc cyanide.
U032	. . . . .	Calcium chromate.
U145	. . . . .	Lead phosphate.
U151	. . . . .	Mercury.
U204	. . . . .	Selenious acid.

U205 . . . . .	Selenium disulfide.
U216 . . . . .	Thallium (I) chloride.
U217 . . . . .	Thallium (I) nitrate.

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<sup>1</sup> A combustion unit is defined as any thermal technology subject to 40 CFR part 264, subpart O; Part 265, subpart O; and/or 266, subpart H.